

AGENDA BILL**Beaverton City Council
Beaverton, Oregon**

SUBJECT: Contract Award – Engineering Design and Construction Management Services for Additional Non-potable Water Infrastructure in the South Cooper Mountain Area Project (CIP 4021G)

FOR AGENDA OF: 10-27-20 **BILL NO:** 20277

MAYOR'S APPROVAL: Denny Doyle

DEPARTMENT OF ORIGIN: Public Works *U*

DATE SUBMITTED: 10-22-20

CLEARANCES: City Attorney *mkj*

Mayor's Office *AC*

Purchasing *TM*

Finance *PO*

Engineering *DW*

PROCEEDING: CONSENT AGENDA
(CONTRACT REVIEW BOARD)

EXHIBITS:

1. Proposal Summary
2. Scope of Work
3. Schedule
4. Funding Plan
5. Project Fee (5. Cost Proposal Summary
5a. Pioneer Design Group;
5b. Otak; and
5c and 5d. Standridge)
6. Project Map

BUDGET IMPACT

EXPENDITURE	AMOUNT	APPROPRIATION
REQUIRED \$825,546	BUDGETED \$1,500,500*	REQUIRED \$-0-

*Account Number 506-75-3680-683 WIFIA Water Construction Fund – South Cooper Mountain Improvements – Construction Design and Engineering. The FY 2020-21 Adopted Budget included appropriations totaling \$1,500,500 for design and engineering contracts on various South Cooper Mountain Improvements of which \$825,000 was identified for the Non-Potable Purple Pipe Projects. The \$25,546 shortfall can be absorbed within the remaining budgetary appropriations for South Cooper Mountain Improvements

RECOMMENDED ACTION:

City Council, acting as the Contract Review Board, authorizes the Mayor to sign three separate contracts for Engineering Design and Construction Management Services with:

1. Pioneer Design Group, Inc. (PDG), in the amount of \$145,819;
2. Otak, Inc., in the amount of \$269,732;
3. Standridge Inc., in the amount of \$409,995;

for a total amount of \$825,546 to provide engineering services for the design of additional non-potable water infrastructure (purple pipe) in the South Cooper Mountain area (CIP 4021G) in contract forms approved by the City Attorney.

Agenda Bill No: 20277

HISTORICAL PERSPECTIVE:

In 2014, the City of Beaverton (City) annexed 544 acres in the South Cooper Mountain (SCM) area of Beaverton that will be primarily residential development. In addition to potable drinking water service, the City is currently developing a non-potable water supply ("purple pipe system") in the SCM area as a water source that will serve irrigation and related outdoor water uses. The purple pipe system is an innovative sustainability measure supported by Council goals over the last three years.

The City started conceptual planning of the purple pipe system in 2016. The City coordinated early planning with the development community since that time, but the rapid pace of development resulted in permitted designs for several subdivisions that did not include the City's most recent (2019) build-out goals for the purple pipe system.

The Council's goals for the purple pipe infrastructure and overall program are based on feedback received during multiple public meetings, Council work sessions and Council public hearings. The stated goals are to: 1) maximize the area to be served by the purple pipe system, and 2) ensure a viable non-potable water utility in SCM. As a result, Council directed City staff to establish agreements with the developers, active in SCM to help achieve these purple pipe program goals. As part of that process, the City is contracting with engineering firms to obtain timely design documents and cost estimates of additional purple pipe infrastructure for four developments with current Site Development applications via a Qualifications Based Request for Proposals.

INFORMATION FOR CONSIDERATION:

A Qualifications Based Request for Proposals for professional engineering services was advertised on September 25, 2020, for the following services, including but not limited to: preparation of preliminary and final design and corresponding engineering cost estimates; conducting design review meetings with City, associated developers, utilities, and regulatory agencies; acquiring all related permits; and providing construction management services. The scope of work includes the design and cost estimate for the additional purple pipe infrastructure not already included in the development approval requirements from the City (see Exhibit 2, Appendix B). The scope of work includes the design of "backbone" pipe (6-inches or greater), "interior" distribution piping (2-4 inches), associated valves, and service laterals and meter boxes to individual properties. The goal is to achieve the pipeline network shown in Exhibit 2, Appendix C, as approved by City Council. A detailed scope of work is presented in Exhibit 2. The area included for this scope of work is shown as Zone 1, Zone 2, and Zone 3 of Exhibit 6. It is the City's intention to award multiple contracts, one for each zone shown in Exhibit 6. All three zones have similar scopes of work.

The mandatory pre-proposal conference was held on October 5, 2020, with four consulting firms in attendance. As shown in the Proposal Summary (Exhibit 1), three proposals were received and opened on October 15, 2020, at 2:00 p.m. from:

1. Pioneer Design Group, Inc., from Portland, OR;
2. Otak, Inc., from Portland, OR; and
3. Standridge Inc., from Vancouver, WA.

The City reviewed the proposals to ensure that the proposals met the requirements for qualifications. Based on the information provided in the proposals, City Staff selected PDG to provide professional engineering services for Zone 1, Otak for Zone 2, and Standridge for Zone 3, respectively. Standridge, Inc., also expressed an interest in providing services as an overall Design Manager Role (Task 8 in Exhibit 2) for the three zones, where as PDG and Otak, Inc., turned down the opportunity to propose on this task. Therefore, Standridge will also be providing support to ensure the designs are standardized for all three zones by updating standard details and text in the City's Engineering Design Manual for non-potable water infrastructure and serving as a design manager for the projects. This design manager role will help to coordinate between the three consultants, provide design review, and coordinate production of final bid documents that have consistent standard details and templates for plans, specifications, and cost estimates for the three zones.

Attached are the Scope of Work (Exhibit 2), Schedule of work (Exhibit 3), Funding Plan (Exhibit 4), Project Fee (Exhibit 5), and Project Map showing the three zones (Exhibit 6). Please note that all three Consultants have similar scope of work for each zone, with the exception of Standridge Inc., which will take on additional role of design manager, as stated above. The design of additional non-potable water infrastructure in SCM is expected to begin in November 2020 and complete 100% bid ready documents by March 2021 in preparation for the 2021 construction season.

The engineering agreements to be awarded include services for final designs and construction management services for the purple pipe infrastructure. The design and cost estimates developed as a part of the engineering agreements will be used in the negotiations of construction agreements with the current four major developers in SCM. The intent of the upcoming construction agreements with developers is to provide a mechanism for the City to fund construction of additional purple pipe infrastructure that is not included in the current plans for those developments. The engineering services to be provided in the recommended contract awards will design and ensure construction of purple pipe infrastructure, by the developers, that will fulfil the goals approved by the Council.

City of Beaverton

PROPOSALS RECEIVED

**Design of Additional Non-potable Water Infrastructure
in the South Cooper Mountain Area
Solicitation #3731-21B**

Closed: October 15, 2020 @ 2:00 PM

Proposals Submitted:

- 1. Otak, Inc. – Portland, OR**
- 2. Pioneer Design Group, Inc. – Portland, OR**
- 3. Standridge Inc. – Vancouver, WA**

City of Beaverton

SCOPE OF WORK

Design of Additional Non-potable Water Infrastructure in the South Cooper Mountain Area Solicitation #3731-21B

Scope of Work

A detailed scope of work for the design of additional non-potable water infrastructure in the South Cooper Mountain (SCM) area is presented below. The area included for this scope of work is shown as Zone 1, Zone 2, and Zone 3 of Appendix A in this exhibit. It is the City of Beaverton's intention to award multiple contracts, one for each zone shown in Appendix A. All three zones have similar scope of work, including but not limited to: preparation of preliminary and final design and corresponding engineering cost estimates; conducting design review meetings with City, associated developers, utilities, and regulatory agencies; acquiring all related permits; and providing construction management services.

This scope of work is intended to develop preliminary engineering designs sufficient to develop capital cost estimates that will be the basis of preparing and approving agreements between the City and the individual developer for each subdivision. The cost estimate will be refined through the final design in this scope of work. The scope of the engineering design is limited to the additional purple pipe infrastructure requested by the City within the applicable subdivision(s) in SCM area as shown in Appendix A. This includes all piping, meter boxes and other appurtenances. The engineering design of the purple pipe backbone infrastructure, also known as "Purple Pipe 1.0" (Appendix B), that is already required in conditions of development in land use approvals and development permits as of September 25, 2020 is **NOT** included in this scope of work, unless the City requests changes to these existing designs. Appendix C shows the over-all City Council approved Purple Pipe infrastructure plan for SCM area. The scope of work for this RFP excludes the design of the "Purple Pipe 1.0" and only includes the design of the additional purple pipe infrastructure that is required to achieve the City Council approved plan for the three zones shown in Appendix A and includes the following seven tasks:

1. Kick-off meeting
2. 30% Engineering Design and Cost Estimate
3. 30% Design Review Meeting
4. 60% Engineering Design and Cost Estimate
5. Developer Briefing Meeting
6. 100% Engineering Design and Cost Estimate
7. Permitting, Construction Management Services, and other tasks

Task 1. Kick-off Meeting

1. Prepare for and participate in a kick-off meeting with City staff to discuss:
 - Project objectives and schedule.
 - Confirm project design area (i.e. subdivisions included in the scope of work).

- Provide drawings as reference of status of existing design (including any as-built drawings, submitted or approved design drawings from City development permit reviews, and relevant draft/working drawings).
 - Discuss questions on Engineering Design Manual (EDM) criteria, requirements, or anticipated deficiencies needed to address installation of purple pipe infrastructure in SCM.
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.

Assumptions:

- Meeting will be a video-conference up to 2-hours with City staff and other developer engineers working in SCM. City staff will provide logistics to set up the meeting.
- City staff (or Purple Pipe Program consultant) will prepare meeting agenda and facilitate discussions at the meeting.

Deliverable:

- Summary of meeting notes for review by City staff.

Task 2. 30% Engineering Design and Cost Estimate

1. As applicable, determine alignment of backbone pipeline in roadway, and locations of where distribution piping, service laterals, and meter boxes will be installed in each subdivision. This may require some follow-up discussions with City staff and developer for the subdivision.
2. Prepare 30% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared for the following:
 - a. Backbone pipeline and appurtenance in the roadway (6-inch lines or greater)
 - b. Distribution pipeline and appurtenances (2- to 4-inch "interior" lines)
 - c. Service laterals
 - d. Meter boxes
 - e. Design details for any site-specific or unique installation locations should be provided as a separate drawing(s).
3. Prepare 30% design technical specifications for the purple pipe infrastructure associated with the components in subtasks 1 and 2.
4. Prepare a Class 3 engineer's opinion of probable construction cost (EOPCC) for the purple pipe infrastructure associated with the components in subtasks 1 and 2.

Assumptions:

- City will provide conceptual purple pipe system connection concepts, and clarifications/additions to EDM based on feedback and discussions from Task 1.
- Follow-up meeting with City staff or developers will be conducted as needed to confirm or finalize the locations of the proposed additional purple pipe infrastructure before preparing the design drawings.
- 30% drawings and specifications will be prepared to a level of detail adequate to support a Class 3 EOPCC.
- City staff will have two weeks to review the 30% design and cost submittal.

Deliverable:

- 30% design drawings and technical specifications.
- Class 3 Engineer's Opinion of Probable Construction Cost.

Task 3. 30% Design Review Meeting

1. Prepare for and conduct a design review meeting with City staff for the 30% design and cost submittal.
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.

Assumptions:

- Meeting will be a video-conference up to 2-hours with City staff. This meeting will be held individually with each engineer working on their respective subdivision(s). City staff will provide logistics to set up the meeting.
- City staff (or Purple Pipe Program consultant) will prepare meeting agenda and facilitate discussions at the meeting.

Deliverable:

- Summary of meeting notes for review by City staff.

Task 4. 60% Engineering Design and Cost Estimate

1. Incorporating comments and discussions from Task 3, prepare 60% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared/revised as in Task 2.
2. Prepare/revise 60% design technical specifications for the purple pipe infrastructure associated with the components in subtask 1.
3. Prepare a Class 2 EOPCC for the purple pipe infrastructure associated with the components in subtasks 1 and 2.

Assumptions:

- 60% drawings and specifications will be prepared in level of detail to prepare a Class 2 EOPCC.
- City staff will have two weeks to review the 60% design and cost submittal.

Deliverable:

- 60% design drawings and technical specifications.
- Class 2 Engineer's Opinion of Probable Construction Cost.

Task 5. Developer Review Meeting

1. Prepare for and participate in a developer review meeting with associated developer and City staff to discuss:
 - Overview of the additional purple pipe infrastructure and cost estimate.
 - Proposed use of the engineering design and costs in the developer agreement.
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.

Assumptions:

- Meeting will be a video-conference up to 2-hours with City staff. This meeting will be held individually with each engineer working on their respective subdivision(s). City staff will provide logistics to set up the meeting.
- City staff (or Purple Pipe Program consultant) will prepare meeting agenda and facilitate discussions at the meeting.

Deliverable:

- Summary of meeting notes for review by City staff.

Task 6. 100% Engineering Design and Cost Estimate

1. Incorporating comments and discussions from Task 5, prepare 100% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared/revised as in Task 2.
2. Prepare/reverse 100% design technical specifications for the purple pipe infrastructure associated with the components in subtask 1.
3. Prepare a Class 1 EOPCC for the purple pipe infrastructure associated with the components in subtasks 1 and 2.

Assumptions:

- 100% drawings and specifications will be prepared in level of detail to prepare a Class 1 EOPCC.
- City staff will have two weeks to review the 100% design and cost submittal.

Deliverable:

- 100% design drawings and technical specifications in conjunction with City of Beaverton's requirement and design standards that the City can use to bid the construction of the additional Non-potable Water Infrastructure in the SCM Area
- Class 1 Engineer's Opinion of Probable Construction Cost for use in contractor bid.

Task 7. Permitting, Construction Management Services, and other tasks

1. Coordinate communication between Developer and City.
2. Coordinate with all utility, regulatory agencies, and developer involved in the design, survey/staking, construction, and permitting tasks for the successful completion of this project and resolve any conflicts that may arise.
3. Acquire permits that are anticipated to be required as a part of design and construction of this project.
4. Ensure Design and Construction Compliance with all requirements for Federal funded projects.
5. Provide services related to construction advertising, contractor bidding, selection, and contract administration.
6. Develop survey information and provide staking for all design and construction related activities.
7. Provide construction inspection services, including coordinating special inspection and testing as required.
8. Use City's Virtual Project Manager website to review submittals, respond to RFIs, upload project documents, and daily logs.
9. Review construction quantities, Monthly Certified Payroll (CPR), Monthly Payment Requests, and provide recommendation of monthly payment to the City.
10. Prepare a final punch list and ensure complete execution of the construction contract.
11. Develop as-built construction documents.

Scope clarifications

1. As clarification, the City will be selecting one or more consultant engineers through this RFP-QBS process to contract directly with the City to complete the design of the additional purple pipe infrastructure not already included in the development approval requirements from the City.
2. The City assumes that additional surveying will be needed to complete the design and engineering services during construction tasks. Preliminary surveying including but not limited to verifying improvements constructed within public right-of-way and/or easements, and construction staking including but not limited to documenting as-built conditions, will be a part of the project. City does not have any pre-selected or preferred surveying contractor(s) for this project. The City further assumes that the selected engineer may need to coordinate with surveyors already working with the developers in these areas.
3. The scope of work includes the design and cost estimate for the additional purple pipe infrastructure not already included in the development approval requirements from the City (Appendix B). The scope of work includes the design of “backbone” pipe (6-inches or greater), “interior” distribution piping (2-4 inches), associated valves, and service laterals and meter boxes to individual properties. The goal is to achieve the pipeline network shown in Appendix C, as approved by City Council.
4. Available design and as-built drawings will be provided to the selected consultant after contract award. All design and as-built drawings are in PDF format, and are not available as CAD files to the City.
5. Final design and as-built plans for this project are to be submitted to the City in the form of CAD files and PDF in addition to print copy.
6. Consultants should assume that the design includes purple pipe distribution system to: (i) connect to the Sterling Park aquifer storage and recovery (ASR) facility), which is the future source of non-potable water to the system, and (ii) piping needed to serve the Scholls Heights Elementary School. Both of these parcels are on the east side of Loon Drive, and designated as part of Zone 2 (South Cooper Mountain Heights area), as noted in Appendix A figure.
7. All areas included in this project for preparing design and construction documents have already completed required land use approvals. Selected Consultants do not have to prepare land use applications. The City is not required to obtain land use approvals for utility projects. The land use and development permitting status of each of the project zones are shown in Appendix D Figure D-1.
8. Appendix E Figure E-1 shows the additional mainline included in designs already prepared by the developers as part of the approved development permits. These additional dashed lines are not part of the scope of this project.
9. 30% design will be presented in plan-view sheets and will verify service availability to lots and open spaces and confirm any looping/connectivity requirements for the overall performance of the system.
10. Consultant will design the pipe network to ensure the purple pipe system will operate with adequate pressure by reviewing the static hydraulic grade line, and including use of pressure reducing valves and pressure relief valves and connection(s) to the public potable water system, if necessary. If connection to the potable water system is necessary, consultant will coordinate with Murraysmith to review the design of the potable/non-potable intertie located at the intersection of Goldcrest Lane and Barrows Rd.
11. At 30% design, MurraySmith to verify serviceability of areas from the existing ASR 3A well and pump system, located on Loon Drive, using hydraulic modeling analysis of the overall system.

12. Each consultant is responsible for producing the bid documents that are WIFIA compliant and particularly ensure that construction specification documents include Davis Bacon Federal Prevailing Wage requirements as required by WIFIA.
13. Ensure if the 2" pipeline is sized adequately or if it needs to be upsized, or if any looping is needed to meet capacity on longer streets with uninterrupted runs.
14. 30% design include only inventory level details about service laterals and meter boxes. 60%-100% design should incorporate specifics about service laterals and meter boxes.

Task 8. Design Manager Role for Standridge Inc.,

1. Determination of what standard details and text in Engineering Design Manual (EDM) is needed for non-potable water infrastructure and present to City Staff
2. Prepare and finalize coordinated standard details / EDM Text with input from City and the consulting firms selected to work on design of Purple Pipe infrastructure in the three zones shown in Appendix A.
3. Present and discuss finalized standard details/EDM Text with City Engineer, Site Development Manager, and other City personnel for City approval and possibly, Council adoption.
4. Create, maintain, and manage schedule for non-potable infrastructure design in SCM project for the consulting firms selected to work on design of Purple Pipe infrastructure in the three zones shown in Appendix A.
5. Review of documents produced (see Deliverables above) by the consulting firms selected to work on design of Purple Pipe infrastructure in the three zones shown in Appendix A, prior to City review by the CDD-Site Development Staff and Public Works Engineering division. While the Design manager is responsible to provide review of these deliverables, Each Consultant will be responsible for the accuracy of the design and stamping their design drawings with their own professional engineering seal.
6. Ensure consistent format in plans, specifications, and cost estimates between the consulting firms selected to work on design of Purple Pipe infrastructure in the three zones shown in Appendix A.

Note: Items 4 through 6 of Task 8 for are valid for 24 months after contract is executed, with an option to extend on a continued T&M basis.

ATTACHMENTS:

APPENDIX A. Project Zone Areas for Inclusion in the Design Scope of Work

APPENDIX B. Purple Pipe Infrastructure Required under Development Conditions ("Purple Pipe 1.0")

APPENDIX C. City Council Approved Purple Pipe Infrastructure Plan


APPENDIX D. Figure D-1. Land Use and Development Permit Review Status


APPENDIX E. Figure E-1. Purple Pipe Backbone Already Built or Included in Permitted Designs


APPENDIX A. Project Zone Areas for Inclusion in the Design Scope of Work


SCM AREA PURPLE PIPE DEVELOPMENT PHASES

Zone


 Zone 1


 Zone 2

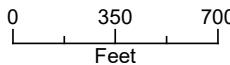
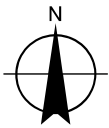
 Zone 3

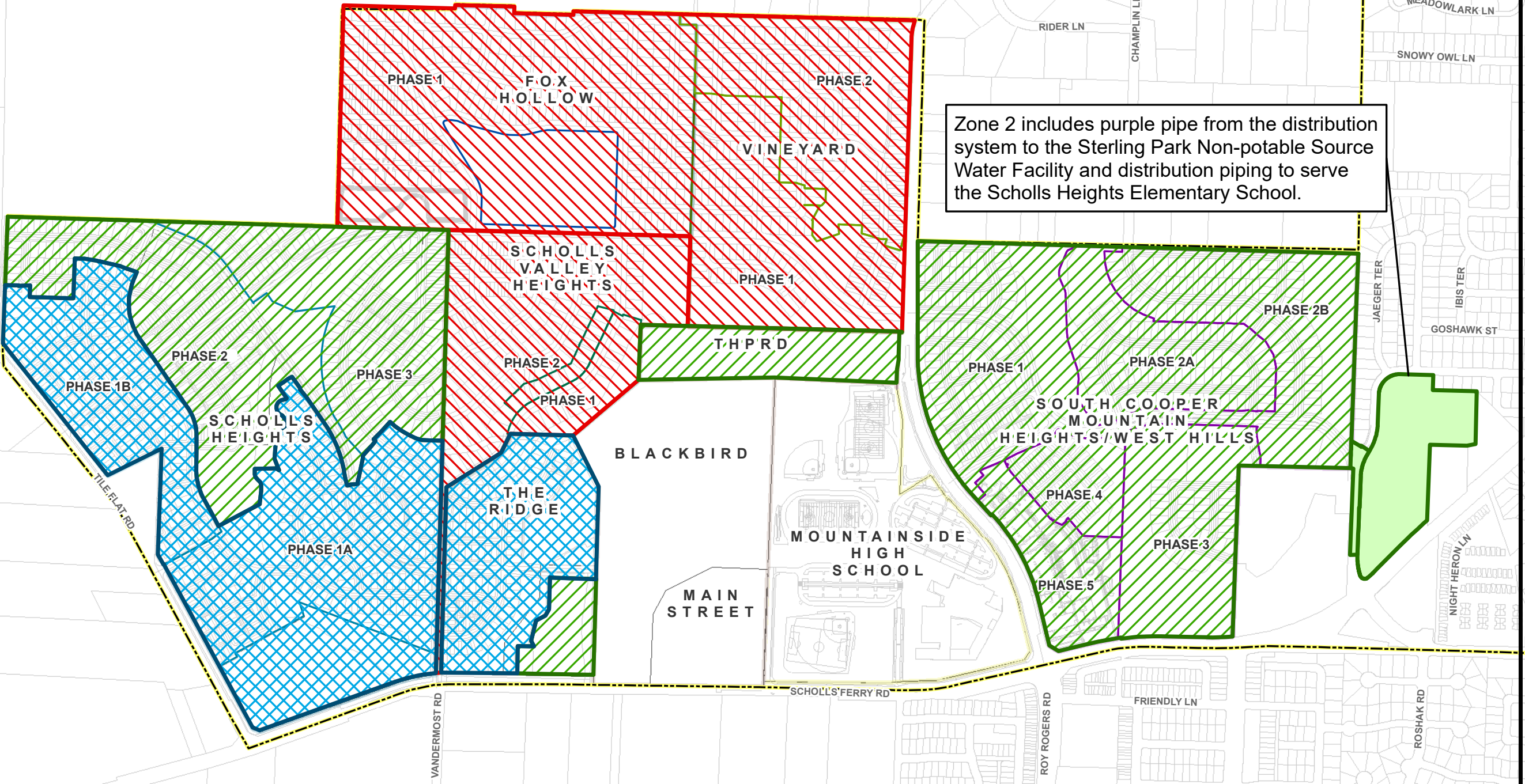
 Sterling Park Facility & Scholls Hts Elementary (Zone 2)

All Other Features

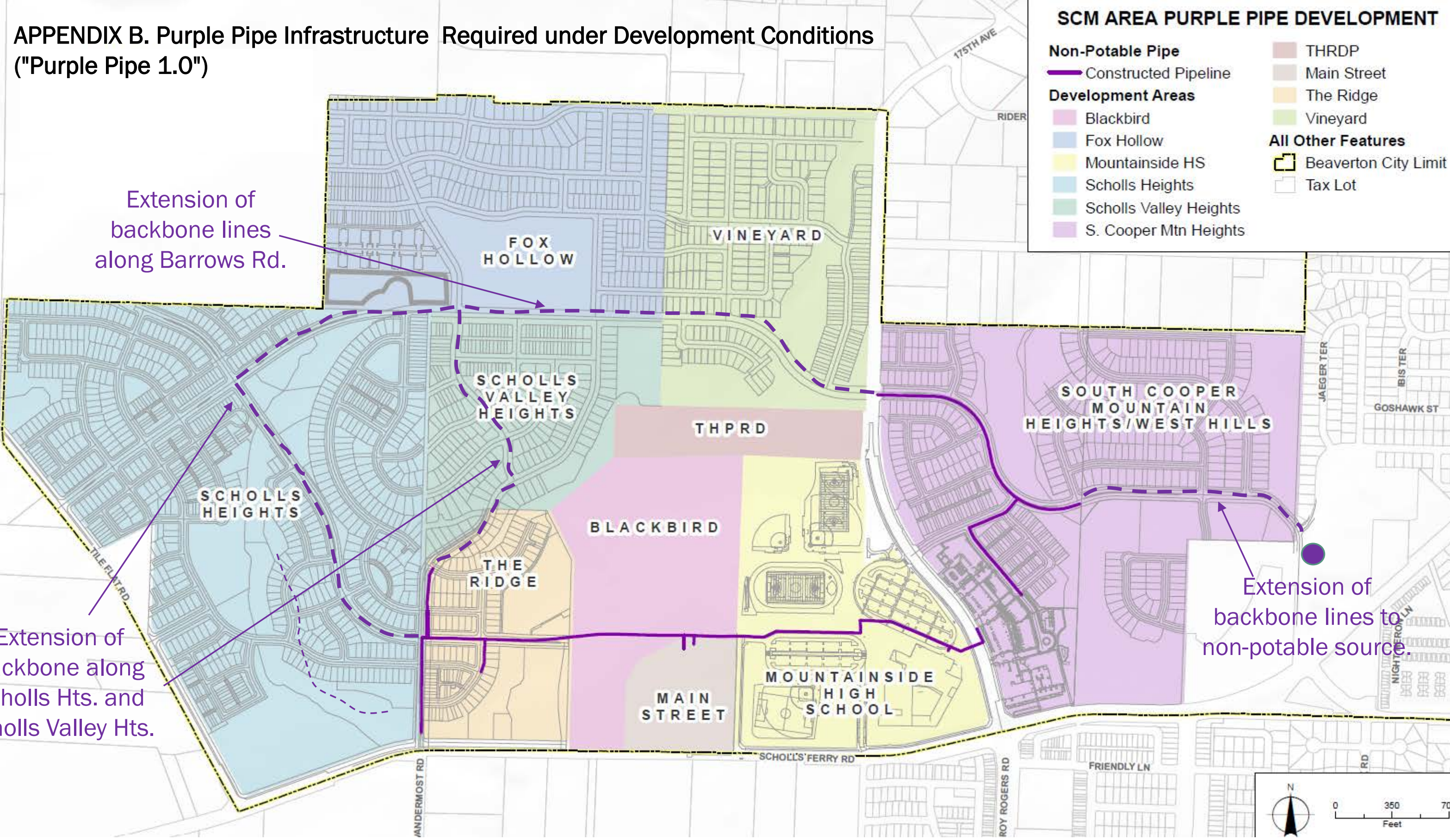
 Beaverton City Limit

 Tax Lot



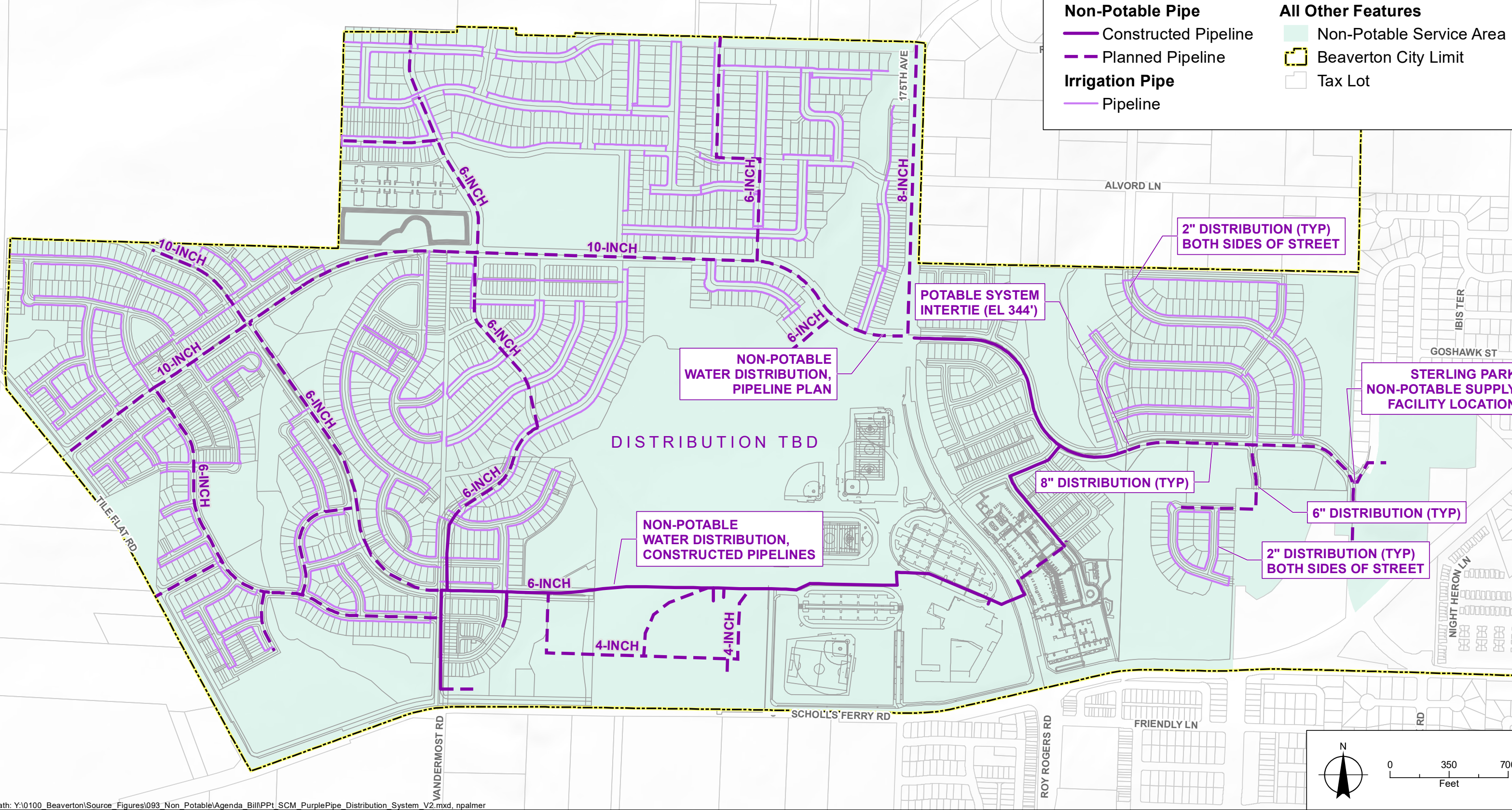


APPENDIX B. Purple Pipe Infrastructure Required under Development Conditions ("Purple Pipe 1.0")



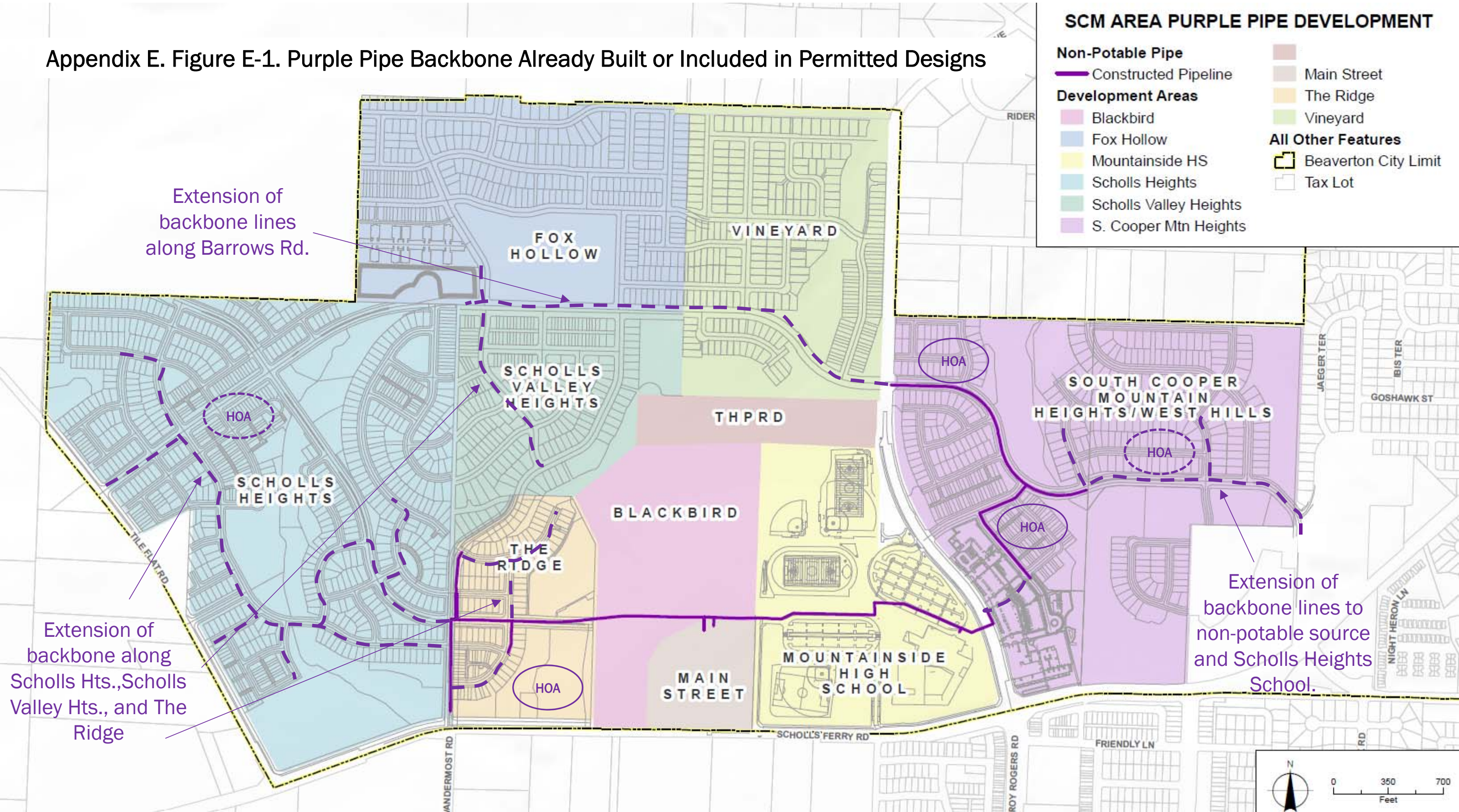
APPENDIX C. City Council Approved Purple Pipe Infrastructure Plan

SCM AREA PURPLE PIPE DISTRIBUTION SYSTEM PLAN





Appendix E. Figure E-1. Purple Pipe Backbone Already Built or Included in Permitted Designs



City of Beaverton PROPOSED SCHEDULE OF WORK

Design of Additional Non-potable Water Infrastructure in the South Cooper Mountain Area Solicitation #3731-21B

Proposed Schedule of Work

The City expects the proposer selected for award of contract to start work as soon as a contract is signed. The City's goal is to have developer agreements in place by end of February 2021. The legal and administrative review process will require the preliminary engineering design and cost estimates for use in the initial developer agreement discussions to be ready by late December 2020 or first week of January 2021. Assuming commencement of services is issued for November 10, 2020, the following schedule is anticipated to achieve this goal:

Task/Activity	Duration	Target Completion
1. Kick-off Meeting	1 day	November 10, 2020
2a. Approval of additional infrastructure (alignment and metering)	1 week	November 17, 2020
2b. 30% design drawings, specification, and cost estimate	2 weeks	December 7, 2020
2c. City review of 30% design	2 weeks	December 21, 2020
3. 30% review meeting with City	1 day	December 21, 2020
<i>"Final" 30% Design and Cost Information available for use in Developer Agreement negotiations</i>		<i>January 4, 2021</i>
4a. 60% design, drawings, specification and cost estimate	2 weeks	January 18, 2021
4b. City review of 60% design	2 weeks	February 8, 2021
5. Developer review meeting	1 day	February 15, 2021
6. 100% design, drawings, specification and cost estimate	2 weeks	March 8, 2021

FUNDING PLAN FOR PROFESSIONAL ENGINEERING DESIGN AND CONSTRUCTION MANAGEMENT SERVICES
Design of Additional Non-potable Water Infrastructure in South Cooper Mountain Area (CIP 4021G)
Solicitation #3731-21B

Account Fund Number and Name	Total Project Fee estimate from Consultant	Estimated Project Fee, per CityStaff	FY 2020-21 Approved Project Budget
506-75-3680-683 * WIFIA Water Construction Fund – South Cooper Mountain Improvements – Construction Design and Engineering	\$825,546	\$900,000	\$1,500,500
Totals	<u>\$825,546</u>	<u>\$900,000</u>	<u>\$1,500,500</u>

*Account Number 506-75-3680-683 WIFIA Water Construction Fund – South Cooper Mountain Improvements – Construction Design and Engineering. The FY 2020-21 Adopted included appropriations totaling \$1,500,500 for design and engineering contracts on various South Cooper Mountain Improvements of which \$825,000 was identified for the Non-Potable Purple Pipe Projects. The \$25,546 shortfall can be absorbed within the remaining budgetary appropriations for South Cooper Mountain Improvements

City of Beaverton

COST PROPOSAL SUMMARY

Design of Additional Non-potable Water Infrastructure in the South Cooper Mountain Area Solicitation #3731-21B

Table 1. Summary of Cost Proposals Received

Firm Name	Zone 1	Zone 2	Zone 3	Task 8 - Design Manager Role*
Pioneer Design Group	\$ 145,819	N/A	N/A	N/A
Otak Inc.,	N/A	\$ 269,732	N/A	N/A
Standridge Inc.,	\$ 394,538	\$ 857,575	\$ 310,175	\$ 416,900

N/A - Cost Not Available, as Consultant did not propose on this Zone/Task

Table 2. Summary of Firms/Cost Proposals Selected for Contract Award

Firms Selected	Zone # / Task #	Cost Proposal	
Pioneer Design Group	Zone 1	\$ 145,819	
Otak Inc.,	Zone 2	\$ 269,732	
	Zone 3	\$ 310,175	
Standridge Inc.,	Task 8 - Design Manager Role*	\$ 99,820	\$ 409,995
Total cost of three contracts=		\$ 825,546	

**Includes Updating Standard Details/Text in Engineering Design Manual for Non-Potable Water Infrastructure, in addition to over all coordination and management of consulting firms selected to work on design of Purple Pipe infrastructure in the SCM area*



APPENDIX 'A' - ZONE 1 PURPLE PIPE CONSULTANT FEE ESTIMATE

4.11.1 (1) a. Direct Salary Rate Schedule

This is a Direct Salary Rate Schedule. Pioneer Design Group does not calculate Overhead on a different hourly rate basis.

4.11.2 Cost Estimate Breakdown

4.11.2.a

Staff Level	Hourly Rate
Staff 1 - Administrative Support	\$ 65.00
Staff 2 - Draftsman (EIT/Designer)	\$ 80.00
Staff 3 - Construction Manager	\$ 110.00
Staff 4 - Engineering Manager	\$ 125.00
Staff 5 - Principal Engineer	\$ 150.00
Staff 6 - Survey Crew	\$ 150.00
Staff 7 - Survey Manager	\$ 125.00

Task	Staff 1 (hr)	Staff 2 (hr)	Staff 3 (hr)	Staff 4 (hr)	Staff 5 (hr)	Staff 6 (hr)	Staff 7 (hr)	Total (hr)	Total Cost (\$)	
Task 1 - Kick-off Meeting (incl. notes and follow-up)				3	3			6	\$ 825.00	
Task 2. 30% Engineering Design and Cost Estimate	4	184	16	20	10			234	\$ 20,740.00	
Task 3. 30% Design Review Meeting (incl. notes and follow-up)				3	3			6	\$ 825.00	\$ 22,390.00 30% Design Fee
Task 4. 60% Engineering Design and Cost Estimate	4	200	16	20	10			250	\$ 22,020.00	
Task 5. Developer Review Meeting (incl. notes and follow-up)				3	3			6	\$ 825.00	\$ 22,845.00 60% Design Fee
Task 6. 100% Engineering Design and Cost Estimate	4	254	16	20	10			304	\$ 26,340.00	\$ 26,340.00 100% Design Fee
Task 7. Permitting, Construction Management Services, Survey, etc.	12	60	90	30	20	94	30	336	\$ 40,080.00	\$ 40,080.00 Construction Fee
Subtotal									\$ 111,655.00	

Item 4.11.2b - All out-of pocket costs, including travel and any other direct non-labor expenses.

\$ 5,000.00

Item 4.11.2c - Fee for Each Phase (listed and identified to the right of the table)

INCL.

Item 4.11.2d - Proposed profit percentage is 10% already included in the hourly rates

INCL.

Item 4.11.2e - No subconsultants are proposed to be used at this time. If required, the fee would be the subconsultant fee +10%.

N/A

25% Contingency \$ 29,163.75

GRAND TOTAL \$ 145,818.75

Assumptions:

1. 30% design drawings will be presented in plan-view sheets and will verify service availability to lots and open spaces and confirm any looping/connectivity requirements for the overall performance of the system.
2. 30% design documents will include only inventory level details about service laterals and meters. 60%-100% design documents should incorporate specifics about service laterals and meters.
- operate with adequate pressure by reviewing the static hydraulic grade line, and including use of pressure relieve valves and connection to the public potable
4. At 30% design stage, MurraySmith, the City's hydraulic Modeling consultant, will verify serviceability of areas from the existing ASR 3A well and pump system, located on Loon Drive, using hydraulic modeling analysis of the overall system.
5. Consultant is responsible for producing the bid documents that are WIFIA compliant and particularly ensuring that construction specification documents include Davis Bacon Federal Prevailing Wage requirements as required by WIFIA.
6. Consultants will ensure if the 2" pipeline is sized adequately or if it needs to be upsized, or if any looping is needed to meet capacity on longer streets with uninterrupted runs.

Design of Additional Non-potable Water Infrastructure in the South Cooper Mountain Area																	
City of Beaverton Solicitation #33731-21B																	
Otak, Inc - Zone 2 Only																	
October 22, 2020 Update			Engr PIC	Proj Mgr	Proj Engr	Specs/Cost/Mode 1	Design/Draft	Inspector Field	Proj Admin		Survey PIC	Office/PLS Professional Land Surveyor III	Field	Field			
			Sr. PIC/Sr. PM Civil	Civil Engineer VIII	Civil Engineer VIII	Civil Engineer VIII	Engineering Tech IV	Representative IV	Project Admin Assist		PIC/PLS Sr. Manager	Professional Land Surveyor III	Survey Crew Chief II	Survey Field Technician III	Total by Task	Contingency	Total w/ Contingency
Task		Rate (\$/hr)	\$ 277.06	\$ 156.90	\$ 159.97	\$ 157.22	\$ 97.95	\$ 79.23	\$ 78.82		\$ 179.57	\$ 111.39	\$ 75.95	\$ 57.21		25%	
1	Kick Off Meeting		4	8	10	0	0	0	2		0	0	0	0	\$4,121	\$1,030	\$5,151
2	30% Engineering Design and Cost Estimate		14	47	134	125	91	6	8		0	12	30	30	\$67,693	\$16,923	\$84,616
3	30% Design Review Meeting		4	12	12	0	0	0	0		0	0	0	0	\$4,911	\$1,228	\$6,138
4	60% Engineering Design and Cost Estimate		4	15	62	34	70	6	8		0	0	0	0	\$26,688	\$6,672	\$33,360
5	Developer Review Meeting		4	6	6	0	0	0	2		0	0	0	0	\$3,167	\$792	\$3,959
6	100% Engineering Design and Cost Estimate		12	16	56	38	72	6	6		0	0	0	0	\$28,769	\$7,192	\$35,961
7A	Permitting		6	20	54	2	50	0	11		0	0	0	0	\$19,518	\$4,880	\$24,398
7B	Construction Management Services (partial)		0	68	46	0	56	266	38		4	20	69	69	\$59,718	\$14,930	\$74,648
8	Overall Design Manager (not in scope)		0	0	0	0	0	0	0		0	0	0	0	\$0	\$0	\$0
Total Hours			48	192	380	199	339	284	75		4	32	99	99	\$214,585		
Total Fees			\$13,299	\$30,125	\$60,790	\$31,286	\$33,207	\$22,501	\$5,912		\$718	\$3,565	\$7,519	\$5,663	\$214,585	\$53,646	\$268,232
Expenses (estimated budget)															\$1,200	\$300	\$1,500
Total															\$215,785	\$53,946	\$269,732



Design of Additional Non-Potable Water Infrastructure in the South Cooper Mountain Area

Zone 1: Fox Hollow, The Vineyard and Scholl's Valley Heights' (Three Phases)	Principal/ Project Manager	Principal Surveyor	Senior Designer	Designer / Inspector	Survey Crew	Drafter	Admin	Total Fee
Negotiated Billing Rate Schedule (NBR)	\$ 140.00	\$ 140.00	\$ 115.00	\$ 105.00	\$ 200.00	\$ 85.00	\$ 75.00	
Task 1. Kick-off Meeting								
1. Prepare for and participate in a kick off meeting with City staff to discuss:	4						4	\$860
Project objectives and schedule.	1							\$140
Confirm project design area (i.e. subdivisions included in the scope of work).	0.5							\$70
Provide drawing as reference of status of existing design (including any as-built drawings, submitted or approved design drawings from City development permit reviews, and relevant draft/ working drawings). CITY TO PROVIDE	8							\$1,120
Discuss questions on Engineering Design Manual criteria, requirements or anticipated deficiencies needed to address installation of purple pipe infrastructure in SCM.	1							\$140
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	4						2	\$710
Total Hours By Position	18.5	0	0	0	0	0	6	
Task 1. Kick-off Meeting	\$ 2,590.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450.00	\$3,040
Task 2. 30% Engineering Design and Cost Estimate								
1. As applicable, determine alignment of backbone pipeline in roadway, and locations of where distribution piping, service laterals, and meters/ meter boxes will be installed in each subdivision. This may require some follow-up discussions with City staff and developer for the subdivision.	8		16					\$2,960
2. Prepare 30% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared for the following:								\$0
a. Backbone pipeline and appurtenance in the roadway (6-inch lines or greater)	2		40					\$4,880
b. Distribution pipeline and appurtenances (2 to 4-inch "interior" lines)	8		40					\$5,720

c. Service laterals (standard detail only)	8		24					\$3,880
d. Meters and meter boxes (standard detail only)	4		24					\$3,320
e. Design details for any site-specific or unique installation locations should be provided as a separate drawing(s).	8		40					\$5,720
3. Prepare 30% design technical specifications for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	8		4				16	\$2,780
4. Prepare a Class 3 engineer's opinion of probable construction cost (EOPCC) for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	8		16			16	4	\$4,620
Total Hours By Position	54	0	204	0	0	16	20	
Task 2. 30% Engineering Design and Cost Estimate	\$ 7,560.00	\$ -	\$23,460.00	\$ -	\$ -	\$ 1,360.00	\$ 1,500.00	\$33,880
Task 3. 30% Design Review Meeting								
1. Prepare for and conduct a design review meeting with City staff for the 30% design and cost submittal.	8		16				4	\$3,260
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	8		2				8	\$1,950
								\$0
Total Hours By Position	16	0	18	0	0	0	12	
Task 3. 30% Design Review Meeting	\$ 2,240.00	\$ -	\$ 2,070.00	\$ -	\$ -	\$ -	\$ 900.00	\$5,210
Task 4. 60% Engineering Design and Cost Estimate								
1. Incorporating comments and discussions from Task 3, prepare 60% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared/ revised as in Task 2.	40		60	60		80		\$25,600
2. Prepare/ revise 60% design technical specifications for the purple pipe infrastructure associated with the components in subtask 1.	8		8				8	\$2,640
3. Prepare a Class 2 EOPCC for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	8		40			40	4	\$9,420
								\$0
								\$0
Total Hours By Position	56	0	108	60	0	120	12	
Task 4. 60% Engineering Design and Cost Estimate	\$ 7,840.00	\$ -	\$12,420.00	\$ 6,300.00	\$ -	\$10,200.00	\$ 900.00	\$37,660
Task 5. Developer Review Meeting								
1. Prepare for and participate in a developer review meeting with associated developer and City staff to discuss:	16		8				8	\$3,760
Overview of the additional purple pipe infrastructure and cost estimate.	8		4					\$1,580
Proposed use of the engineering design and costs in the developer agreement.	16						2	\$2,390

2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	4						4	\$860
								\$0
Total Hours By Position	44	0	12	0	0	0	14	
Task 5. Developer Review Meeting	\$ 6,160.00	\$ -	\$ 1,380.00	\$ -	\$ -	\$ -	\$ 1,050.00	\$8,590
Task 6. 100% Engineering Design and Cost Estimate								
1. Incorporating comments and discussions form Task 5, prepare 100% design drawings of additional purple pipe infrastructure, as applicable, Typical details should be prepared/ revised as in Task 2.	16		40			40		\$10,240
2. Prepare/ revise 100% design technical specifications for the purple pipe infrastructure associated with the components in	8						16	\$2,320
3. Prepare a Class 1 EOPCC for the purple pipe infrastructure associated with the components in subtask 1 and 2.	8		16			24	2	\$5,150
								\$0
								\$0
Total Hours By Position	32	0	56	0	0	64	18	
Task 6. 100% Engineering Design and Cost Estimate	\$ 4,480.00	\$ -	\$ 6,440.00	\$ -	\$ -	\$ 5,440.00	\$ 1,350.00	\$17,710
Task 7. Permitting, Construction Management Services, and other tasks								
1. Coordinate communication between Developer and City.	80			24			40	\$16,720
2. Coordinate with all utility, regulatory agencies, and developer involved in the design, survey/ staking, construction, and permitting tasks for the successful completion of the project and resolve any conflicts that may arise.	80		40					\$15,800
3. Acquire permits that are anticipated to be required as part of design and construction of this project.	80			80				\$19,600
4. Ensure Design and Construction Compliance with all requirements for Federal funded projects.	16			24				\$4,760
ITEMS BELOW CAN BE PROVIDED AS PART OF THE DEVELOPER PERMITTING/CONSTRUCTION WHICH WILL REDUCE COST; PROVIDED ASSUME ADDENDUM TO PLAN AND CITY REP FOR FOX HOLLOW, VINEYARD, SCHOLL'S VALLEY HEIGHTS								COSTS
5. Provide services related to construction advertising, contractor bidding, selection and contract administration	60						40	\$11,400
6. Develop survey information and provide staking for all design and construction related activities.	16	40		80	160			\$48,240
7. Provide construction inspection services, including coordinating special inspection and testing as required.	40			180				\$24,500

8. Use City's Virtual Project Manager website to review submittals, respond to RFIs, upload project documents, and daily logs.	40			80			40	\$17,000
9. Review construction quantities, Monthly Certified Payroll (CPR), Monthly Payment Requests, and provide recommendation of monthly payment to the City.	80						40	\$14,200
10. Prepare a final punch list and ensure complete execution of the construction contract.	40			40				\$9,800
11. Develop as-built construction documents.	40		8	40		80		\$17,520
Total Hours By Position	572	40	48	548	160	80	160	
Task 7. Permitting, Construction Management Services, and other tasks	\$ 80,080.00	\$ 5,600.00	\$ 5,520.00	\$57,540.00	\$32,000.00	\$ 6,800.00	\$ 12,000.00	\$199,540
Summary of Costs								
Task 1. Kick-off Meeting								\$ 3,040.00
Task 2. 30% Engineering Design and Cost Estimate								\$ 33,880.00
Task 3. 30% Design Review Meeting								\$ 5,210.00
Task 4. 60% Engineering Design and Cost Estimate								\$ 37,660.00
Task 5. Developer Review Meeting								\$ 8,590.00
Task 6. 100% Engineering Design and Cost Estimate								\$ 17,710.00
Task 7. Permitting, Construction Management Services, and other tasks								\$ 199,540.00
Estimated Expenses								\$ 10,000.00
Subtotal								\$ 315,630.00
25% Contingency								\$ 78,907.50
Zone 1 Total:								\$394,537.50

NOTE:

Services requested outside of those included in this scope of services will be completed on a time and materials basis using Standridge Inc.'s standard hourly rates in effect at the time the request is made.



Design of Additional Non-Potable Water Infrastructure in the South Cooper Mountain Area

Zone 23: Heights, Ridge Multifamily, Scholl's Hts Ph 2 & 3, THPRD, Sterling Park Extension	Principal/ Project Manager	Principal Surveyor	Senior Designer	Designer / Inspector	Survey Crew	Drafter	Admin	Total Fee
Negotiated Billing Rate Schedule (NBR)	\$ 140.00	\$ 140.00	\$ 115.00	\$ 105.00	\$ 200.00	\$ 85.00	\$ 75.00	
Task 1. Kick-off Meeting								
1. Prepare for and participate in a kick off meeting with City staff to discuss:	8		8				8	\$2,640
Project objectives and schedule.	4							\$560
Confirm project design area (i.e. subdivisions included in the scope of work).	8							\$1,120
Provide drawing as reference of status of existing design (including any as-built drawings, submitted or approved design drawings from City development permit reviews, and relevant draft/ working drawings). CITY TO PROVIDE	16							\$2,240
Discuss questions on Engineering Design Manual criteria, requirements or anticipated deficiencies needed to address installation of purple pipe infrastructure in SCM.	4							\$560
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	16						2	\$2,390
Total Hours By Position	56	0	8	0	0	0	10	
Task 1. Kick-off Meeting	\$ 7,840.00	\$ -	\$ 920.00	\$ -	\$ -	\$ -	\$ 750.00	\$9,510
Task 2. 30% Engineering Design and Cost Estimate								
1. As applicable, determine alignment of backbone pipeline in roadway, and locations of where distribution piping, service laterals, and meters/ meter boxes will be installed in each subdivision. This may require some follow-up discussions with City staff and developer for the subdivision.	24		40					\$7,960
2. Prepare 30% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared for the following:								\$0
a. Backbone pipeline and appurtenance in the roadway (6-inch lines or greater)	8		60					\$8,020
b. Distribution pipeline and appurtenances (2 to 4-inch "interior" lines)	16		40					\$6,840

c. Service laterals	8		40					\$5,720
d. Meters and meter boxes	8		40					\$5,720
e. Design details for any site-specific or unique installation locations should be provided as a separate drawing(s).	16		40					\$6,840
3. Prepare 30% design technical specifications for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	40		16				40	\$10,440
4. Prepare a Class 3 engineer's opinion of probable construction cost (EOPCC) for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	40		40	40			16	\$15,600
Total Hours By Position	160	0	316	40	0	0	56	
Task 2. 30% Engineering Design and Cost Estimate	\$ 22,400.00	\$ -	\$36,340.00	\$ 4,200.00	\$ -	\$ -	\$ 4,200.00	\$67,140
Task 3. 30% Design Review Meeting								
1. Prepare for and conduct a design review meeting with City staff for the 30% design and cost submittal.	24		40				24	\$9,760
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	24		2				24	\$5,390
								\$0
Total Hours By Position	48	0	42	0	0	0	48	
Task 3. 30% Design Review Meeting	\$ 6,720.00	\$ -	\$ 4,830.00	\$ -	\$ -	\$ -	\$ 3,600.00	\$15,150
Task 4. 60% Engineering Design and Cost Estimate								
1. Incorporating comments and discussions from Task 3, prepare 60% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared/ revised as in Task 2.	40		80	240		320		\$67,200
2. Prepare/ revise 60% design technical specifications for the purple pipe infrastructure associated with the components in subtask 1.	40		8				40	\$9,520
3. Prepare a Class 2 EOPCC for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	24		40	40		40	16	\$16,760
								\$0
								\$0
Total Hours By Position	104	0	128	280	0	360	56	
Task 4. 60% Engineering Design and Cost Estimate	\$ 14,560.00	\$ -	\$14,720.00	\$ 29,400.00	\$ -	\$30,600.00	\$ 4,200.00	\$93,480
Task 5. Developer Review Meeting								
1. Prepare for and participate in a developer review meeting with associated developer and City staff to discuss:	40		16				8	\$8,040
Overview of the additional purple pipe infrastructure and cost estimate.	16		24					\$5,000
Proposed use of the engineering design and costs in the developer agreement.	24		16				8	\$5,800

2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	16						16	\$3,440
								\$0
Total Hours By Position	96	0	56	0	0	0	32	
Task 5. Developer Review Meeting	\$ 13,440.00	\$ -	\$ 6,440.00	\$ -	\$ -	\$ -	\$ 2,400.00	\$22,280
Task 6. 100% Engineering Design and Cost Estimate								
1. Incorporating comments and discussions from Task 5, prepare 100% design drawings of additional purple pipe infrastructure, as applicable, Typical details should be prepared/ revised as in Task 2.	40		80				120	\$25,000
2. Prepare/ revise 100% design technical specifications for the purple pipe infrastructure associated with the components in	40						40	\$8,600
3. Prepare a Class 1 EOPCC for the purple pipe infrastructure associated with the components in subtask 1 and 2.	40		40				40	\$14,200
								\$0
								\$0
Total Hours By Position	120	0	120	0	0	160	48	
Task 6. 100% Engineering Design and Cost Estimate	\$ 16,800.00	\$ -	\$13,800.00	\$ -	\$ -	\$13,600.00	\$ 3,600.00	\$47,800
Task 7. Permitting, Construction Management Services, and other tasks								
1. Coordinate communication between Developer and City.	160			80			40	\$33,800
2. Coordinate with all utility, regulatory agencies, and developer involved in the design, survey/ staking, construction, and permitting tasks for the successful completion of the project and resolve any conflicts that may arise.	120	40	80				40	\$34,600
3. Acquire permits that are anticipated to be required as part of design and construction of this project.	120			80				\$25,200
4. Ensure Design and Construction Compliance with all requirements for Federal funded projects.	40		60	40			40	\$19,700
ITEMS BELOW CAN BE PROVIDED AS PART OF THE DEVELOPER PERMITTING/CONSTRUCTION WHICH WILL REDUCE COST; PROVIDED ASSUME ADDENDUM TO PLAN AND CITY REP FOR HEIGHTS, RIDGE MF, SCHOLLS HT 2 & 3, THPRD, STERLING EXTEN (6 PHASES)								COSTS
5. Provide services related to construction advertising, contractor bidding, selection and contract administration	80						80	\$17,200
6. Develop survey information and provide staking for all design and construction related activities.	80	80		80	320			\$94,800
7. Provide construction inspection services, including coordinating special inspection and testing as required.	120			320				\$50,400
8. Use City's Virtual Project Manager website to review submittals, respond to RFIs, upload project documents, and daily logs.	120			160			80	\$39,600

9. Review construction quantities, Monthly Certified Payroll (CPR), Monthly Payment Requests, and provide recommendation of monthly payment to the City.	160						80	\$28,400
10. Prepare a final punch list and ensure complete execution of the construction contract.	80			120				\$23,800
11. Develop as-built construction documents.	80		80	120		120		\$43,200
Total Hours By Position	1160	120	220	1000	320	120	360	
Task 7. Permitting, Construction Management Services, and other tasks	\$ 162,400.00	\$16,800.00	\$25,300.00	\$105,000.00	\$64,000.00	\$10,200.00	\$ 27,000.00	\$410,700
Summary of Costs								
Task 1. Kick-off Meeting								\$ 9,510.00
Task 2. 30% Engineering Design and Cost Estimate								\$ 67,140.00
Task 3. 30% Design Review Meeting								\$ 15,150.00
Task 4. 60% Engineering Design and Cost Estimate								\$ 93,480.00
Task 5. Developer Review Meeting								\$ 22,280.00
Task 6. 100% Engineering Design and Cost Estimate								\$ 47,800.00
Task 7. Permitting, Construction Management Services, and other tasks								\$ 410,700.00
Estimated Expenses								\$ 20,000.00
Subtotal								\$ 686,060.00
25% Contingency								\$ 171,515.00
Zone 3 Total:								\$857,575.00

NOTE:

Services requested outside of those included in this scope of services will be completed on a time and materials basis using Standridge Inc.'s standard hourly rates in effect at the time the request is made.



Design of Additional Non-Potable Water Infrastructure in the South Cooper Mountain Area

Zone 32: The Ridge and Scholl's Hts 1A & 1B' (Three Phases)	Principal/ Project Manager	Principal Surveyor	Senior Designer	Designer / Inspector	Survey Crew	Drafter	Admin	Total Fee
Negotiated Billing Rate Schedule (NBR)	\$ 140.00	\$ 140.00	\$ 115.00	\$ 105.00	\$ 200.00	\$ 85.00	\$ 75.00	
Task 1. Kick-off Meeting								
1. Prepare for and participate in a kick off meeting with City staff to discuss:	4						4	\$860
Project objectives and schedule.	1							\$140
Confirm project design area (i.e. subdivisions included in the scope of work).	0.5							\$70
Provide drawing as reference of status of existing design (including any as-built drawings, submitted or approved design drawings from City development permit reviews, and relevant draft/ working drawings).	2		2					\$510
Discuss questions on Engineering Design Manual criteria, requirements or anticipated deficiencies needed to address installation of purple pipe infrastructure in SCM.	1							\$140
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	2						2	\$430
Total Hours By Position	10.5	0	2	0	0	0	6	
Task 1. Kick-off Meeting	\$ 1,470.00	\$ -	\$ 230.00	\$ -	\$ -	\$ -	\$ 450.00	\$2,150
Task 2. 30% Engineering Design and Cost Estimate								
1. As applicable, determine alignment of backbone pipeline in roadway, and locations of where distribution piping, service laterals, and meters/ meter boxes will be installed in each subdivision. This may require some follow-up discussions with City staff and developer for the subdivision.	8		16					\$2,960
2. Prepare 30% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared for the following:								\$0
a. Backbone pipeline and appurtenance in the roadway (6-inch lines or greater)	2		40					\$4,880
b. Distribution pipeline and appurtenances (2 to 4-inch "interior" lines)	4		32					\$4,240

c. Service laterals (standard detail)	8		8					\$2,040
d. Meters and meter boxes (standard detail)	4		16					\$2,400
e. Design details for any site-specific or unique installation locations should be provided as a separate drawing(s).	8		16					\$2,960
3. Prepare 30% design technical specifications for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	8		4				16	\$2,780
4. Prepare a Class 3 engineer's opinion of probable construction cost (EOPCC) for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	8		16			12	4	\$4,280
Total Hours By Position	50	0	148	0	0	12	20	
Task 2. 30% Engineering Design and Cost Estimate	\$ 7,000.00	\$ -	\$17,020.00	\$ -	\$ -	\$ 1,020.00	\$ 1,500.00	\$26,540
Task 3. 30% Design Review Meeting								
1. Prepare for and conduct a design review meeting with City staff for the 30% design and cost submittal.	8		8				4	\$2,340
2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	2		2				8	\$1,110
								\$0
Total Hours By Position	10	0	10	0	0	0	12	
Task 3. 30% Design Review Meeting	\$ 1,400.00	\$ -	\$ 1,150.00	\$ -	\$ -	\$ -	\$ 900.00	\$3,450
Task 4. 60% Engineering Design and Cost Estimate								
1. Incorporating comments and discussions from Task 3, prepare 60% design drawings of additional purple pipe infrastructure, as applicable. Typical details should be prepared/ revised as in Task 2.	16		60	60		80		\$22,240
2. Prepare/ revise 60% design technical specifications for the purple pipe infrastructure associated with the components in subtask 1.	8		8				16	\$3,240
3. Prepare a Class 2 EOPCC for the purple pipe infrastructure associated with the components in subtasks 1 and 2.	8		24			16	8	\$5,840
								\$0
								\$0
Total Hours By Position	32	0	92	60	0	96	24	
Task 4. 60% Engineering Design and Cost Estimate	\$ 4,480.00	\$ -	\$10,580.00	\$ 6,300.00	\$ -	\$ 8,160.00	\$ 1,800.00	\$31,320
Task 5. Developer Review Meeting								
1. Prepare for and participate in a developer review meeting with associated developer and City staff to discuss:	8		8				8	\$2,640
Overview of the additional purple pipe infrastructure and cost estimate.	8		4					\$1,580
Proposed use of the engineering design and costs in the developer agreement.	8						2	\$1,270

2. Prepare meeting notes within 3 days of meeting to City for review. City staff will compile all notes and provide a meeting summary to all meeting attendees.	4						4	\$860
								\$0
Total Hours By Position	28	0	12	0	0	0	14	
Task 5. Developer Review Meeting	\$ 3,920.00	\$ -	\$ 1,380.00	\$ -	\$ -	\$ -	\$ 1,050.00	\$6,350
Task 6. 100% Engineering Design and Cost Estimate								
1. Incorporating comments and discussions from Task 5, prepare 100% design drawings of additional purple pipe infrastructure, as applicable, Typical details should be prepared/ revised as in Task 2.	16		24				40	\$8,400
2. Prepare/ revise 100% design technical specifications for the purple pipe infrastructure associated with the components in	8						16	\$2,320
3. Prepare a Class 1 EOPCC for the purple pipe infrastructure associated with the components in subtask 1 and 2.	8		16				24	\$5,150
								\$0
								\$0
Total Hours By Position	32	0	40	0	0	64	18	
Task 6. 100% Engineering Design and Cost Estimate	\$ 4,480.00	\$ -	\$ 4,600.00	\$ -	\$ -	\$ 5,440.00	\$ 1,350.00	\$15,870
Task 7. Permitting, Construction Management Services, and other tasks								
1. Coordinate communication between Developer and City.	40			24			40	\$11,120
2. Coordinate with all utility, regulatory agencies, and developer involved in the design, survey/ staking, construction, and permitting tasks for the successful completion of the project and resolve any conflicts that may arise.	80							\$11,200
3. Acquire permits that are anticipated to be required as part of design and construction of this project.	40			40			8	\$10,400
4. Ensure Design and Construction Compliance with all requirements for Federal funded projects.	16			16			8	\$4,520
ITEMS BELOW CAN BE PROVIDED AS PART OF THE DEVELOPER PERMITTING/CONSTRUCTION WHICH WILL REDUCE COST; COSTS PROVIDED ASSUME STAND-ALONE PROJECT FOR THE RIDGE, AND SUPPLEMENTAL SERVICES FOR SCHOLL'S HTS 1A & 1B AT TIME OF CONSTRUCTION								
5. Provide services related to construction advertising, contractor bidding, selection and contract administration	40						40	\$8,600
6. Develop survey information and provide staking for all design and construction related activities.	8	16		40	120			\$31,560
7. Provide construction inspection services, including coordinating special inspection and testing as required.	40			160				\$22,400

8. Use City's Virtual Project Manager website to review submittals, respond to RFIs, upload project documents, and daily logs.	40			80			40	\$17,000
9. Review construction quantities, Monthly Certified Payroll (CPR), Monthly Payment Requests, and provide recommendation of monthly payment to the City.	80						40	\$14,200
10. Prepare a final punch list and ensure complete execution of the construction contract.	40			24				\$8,120
11. Develop as-built construction documents.	40		8	24		80		\$15,840
Total Hours By Position	464	16	8	408	120	80	176	
Task 7. Permitting, Construction Management Services, and other tasks	\$ 64,960.00	\$ 2,240.00	\$ 920.00	\$42,840.00	\$24,000.00	\$ 6,800.00	\$ 13,200.00	\$154,960
Summary of Costs								
Task 1. Kick-off Meeting								\$ 2,150.00
Task 2. 30% Engineering Design and Cost Estimate								\$ 26,540.00
Task 3. 30% Design Review Meeting								\$ 3,450.00
Task 4. 60% Engineering Design and Cost Estimate								\$ 31,320.00
Task 5. Developer Review Meeting								\$ 6,350.00
Task 6. 100% Engineering Design and Cost Estimate								\$ 15,870.00
Task 7. Permitting, Construction Management Services, and other tasks								Items 1-4 \$ 37,240.00
Task 7. Permitting, Construction Management Services, and other tasks								Items 5-11 \$ 117,720.00
Estimated Expenses								\$ 7,500.00
Subtotal								\$ 248,140.00
25% Contingency								\$ 62,035.00
Zone 2 Total:								\$310,175.00

NOTE:

Services requested outside of those included in this scope of services will be completed on a time and materials basis using Standridge Inc.'s standard hourly rates in effect at the time the request is made.



Design of Additional Non-Potable Water Infrastructure in the South Cooper Mountain Area

Task 8: Overall Design Manager (Revised to 24 Month Period, With Option to Extend)			Principal/ Design Manager All Zones	Senior Designer	Admin	Total Fee
Negotiated Billing Rate Schedule (NBR)			\$ 140.00	\$ 110.00	\$ 75.00	
Task 8. Overall Design Manager						
1. Determination of what standard details and text in Engineering Design Manual (EDM) is needed for non-potable water infrastructure and present to			60	40		\$12,800
2. Prepare and finalize coordinated standard details / EDM Text with input from City and the consulting firms selected to work on design of Purple Pipe infrastructure in the three zones shown in updated Appendix A of Addendum 2 of RFP-QBS 3731-21 (see attached).			40	40	8	\$10,600
3. Present and discuss finalized standard details/EDM Text with City Engineer, Site Development Manager, and other City personnel for City Staff approval and possibly, Council adoption.			24	16	8	\$5,720
4. Create, maintain, and manage schedule for non-potable infrastructure design in SCM project for the consulting firms selected to work on design of Purple Pipe infrastructure in the three zones shown in updated Appendix A of Addendum 2 of RFP-QBS 3731-21. (Up to 24 months with option to extend)			40	0	16	\$6,800
5. Review of documents produced (see Deliverables noted in Scope of Section of RFP-QBS 3731-21) by the consulting firms selected to work on design of Purple Pipe infrastructure in the three zones shown in Appendix A, prior to City review (CDD-Site Development Staff and Public Works Engineering division). While the Design manager is responsible to provide review of these deliverables, Each Consultant will be responsible for the accuracy of the design and stamping their design drawings with their own professional engineering seal. (Review period up to 24 months with option to extend)			290	0	12	\$41,500

6. Ensure consistent format in plans, specifications, and cost estimates between the consulting firms selected to work on design of Purple Pipe infrastructure in the three zones shown in Appendix A. (Review period up to 24 months with option to extend)

		120	0	8	\$17,400
Total Hours By Position		574	96	52	
Task 8. Overall Design Manager		\$ 80,360.00	\$ 10,560.00	\$ 3,900.00	\$94,820

Summary of Costs

Task 8. Overall Design Manager	\$ 94,820.00
Estimated Expenses	\$ 5,000.00
Total	\$ 99,820.00

NOTES:


Services requested outside of those included in this scope of services will be completed on a time and materials basis using Standridge Inc.'s standard hourly rates in effect at the time the request is made.


Items 4 through 6 are T&M, valid for 24 months after contract is executed, with an option to extend on a continued T&M basis.


APPENDIX A. Project Zone Areas for Inclusion in the Design Scope of Work


SCM AREA PURPLE PIPE DEVELOPMENT PHASES

Zone


 Zone 1


 Zone 2

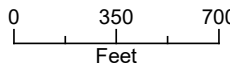
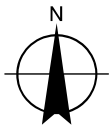
 Zone 3

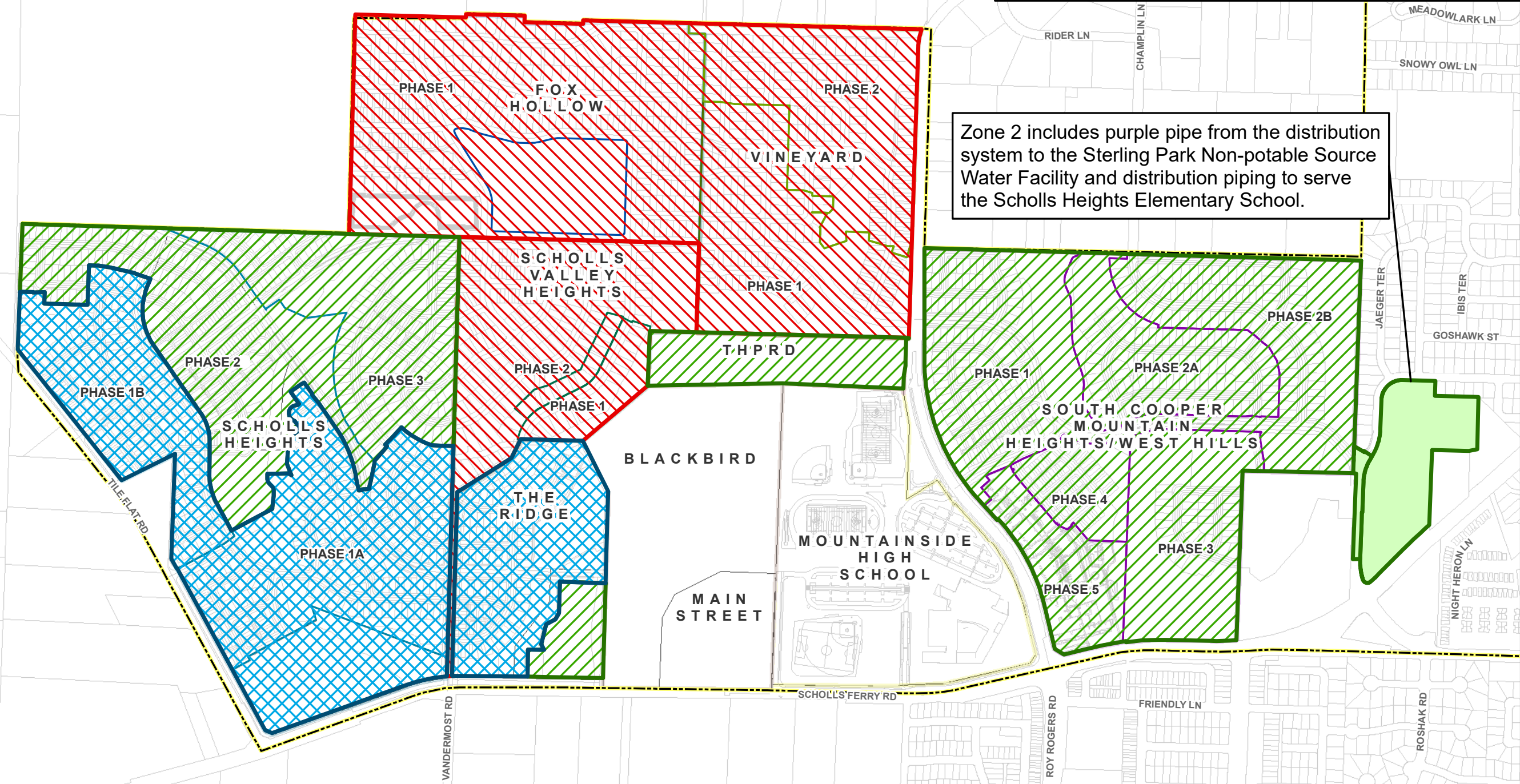
 Sterling Park Facility & Scholls Hts Elementary (Zone 2)

All Other Features

 Beaverton City Limit

 Tax Lot





APPENDIX A - Project Zone Areas for Inclusion in the Design Scope of Work